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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/505,267	03/18/2005	Takahisa Jitsuno	12480-000065/US	7597

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EXAMINER

HASAN, MOHAMMED A

ART UNIT PAPER NUMBER

2873

DATE MAILED: 06/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/505,267	Applicant(s) JITSUNO ET AL.	
	Examiner Mohammed Hasan	Art Unit 2873	

**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6 and 10 is/are rejected.
- 7) ☒ Claim(s) 4 and 7-9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al (5,225,935).

Regarding claim 1, Watanabe et al discloses (refer to figures 2A-2E) a production method for an optical lens (20) comprising the steps of: hardening a first resin into a resin-injection portion of a base body (9a), the first resin (4b) being a light hardening resin or a heat hardening resin, forming a pre-lens by further a second resin on the hardened first resin, the second resin (7) being the light hardening resin or the heat hardening resin and forming a lens by hardening the second resin (column 5, lines 5 – 18, column 6, lines 11-15, column 6, lines 59 – 65).

Watanabe et al discloses all of the claimed limitations except inject first resin and second resin.

However, Watanabe et al teaches another alternative method is to inject a light-permissive substance such as polystyrene, acrylic, resin, poly vinyl chloride, polycarbonate and glass in to the stamper (column 7, lines 29-32).

It would have been obvious to one of ordinary skill in the art at the time invention was made to provide inject a light permissive substance in to first and second resin for the purpose of microlens is secured irrespective of any changes in temperature and any shock as taught by Watanabe (column 2, lines 66-68).

Regarding claim 2, Watanabe et al discloses, where the refraction index of the second resin is higher than that of the first resin (column 7, lines 55-65).

Regarding claim 3, Watanabe et al discloses, wherein the first resin (4b) and the second resin (7) are ultraviolet hardening resin and they are hardened by irradiating ultraviolet rays thereon (column 5, lines 2 – 18).

Regarding claim 6, Watanabe et al discloses, wherein the first resin and the second resin are ultraviolet hardening resin and they are hardened by irradiating ultraviolet rays thereon (column 5, lines 2 – 18).

Regarding claim 10, Watanabe et al discloses, wherein a shape of the formed lens (10) is created without using a stamper (column 3, line 28).

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2. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al (5,225,935) in view of Watanabe et al (5,661,834).

Regarding claim 5, Watanabe et al ('935) discloses an optical lens production method comprising the steps of: injecting and hardening a first resin into the resin-injection portion, the first resin being a light hardening resin or a heat hardening resin, forming a pre-lens by further injecting a second resin on the hardening first resin, the second resin being the light hardening resin and the heat hardening resin and forming a lens by hardening the second resin (column 5, lines 5 – 18).

Watanabe et al ('935) discloses all of the claimed limitations except an optical fiber connector in which a lens is formed at a resin-injection portion positioning at a tip of a core led out from an edge portion of an optical fiber.

However, Watanabe et al ('835) discloses (refer to figure 11) a ferrule bore 5, an optical fiber 3 and a lens 9 (column 1, lines 13 – 26).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a fiber connector and an optical fiber connecting with Watanabe et al ('935) micro lens system for the purpose of a steps for fabrication of lens achieve a high degree of accuracy as taught by Watanabe et al ('834) (column 1, lines 54 – 56).

***Allowable Subject Matter***

3. Claims 4, and 7-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to show the step of forming a lens, the wave front aberration of light that has transmitted the pre-lens is measures, and the lens is so formed as to have such a shape that wave front aberration is close to 0, and a shape of the formed lens is based on a weight of the second resin and a surface tension of the second resin.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The closest prior art as follows: Maticcio et al (5,716,540) discloses apparatus and method for producing center gated lens molds for contact lens manufacture.

***Response to Arguments***

6. Applicant's arguments with respect to claims 1-3, 5, 6 and 10 have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant argument Watanabe et al (5,225,935) discloses (refer to figures 2A-2E) a production method for an optical lens (20) comprising the steps of: hardening a first resin into a resin-injection portion of a base body (9a), the first resin

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(4b) being a light hardening resin or a heat hardening resin, forming a pre-lens by further a second resin on the hardened first resin, the second resin (7) being the light hardening resin or the heat hardening resin and forming a lens by hardening the second resin (column 5, lines 5 – 18, column 6, lines 11-15, column 6, lines 59 – 65). Watanabe et al teaches another alternative method is to inject a light-permissive substance such as polystyrene, acrylic, resin, poly vinyl chloride, polycarbonate and glass in to the stamper (column 7, lines 29-32).

### ***Conclusion***

**7. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammed Hasan whose telephone number is (571) 272-2331. The examiner can normally be reached on M-TH, 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky L Mack can be reached on (571) 272- 2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MH  
June 19, 2006

  
**RICKY MACK**  
**SUPERVISORY PATENT EXAMINER**